

U.S. Patent Application No. 10/047,440
Amendment dated January 30, 2004
Reply to Office Action dated November 6, 2003

REMARKS/ARGUMENTS

Reconsideration and continued examination of the above-identified application are respectfully requested.

The amendment to the claims further defines what the applicants regard as the invention. Full support for the amendment can be found throughout the present application, for instance, at page 19, lines 15 and 18. Accordingly, no questions of new matter should arise and entry of the amendment is respectfully requested.

Claims 1-56 are pending in the application. Claims 1-19 and 26-35 have been withdrawn.

The Examiner has indicated that claims 20-22, 36-38, and 40-45 are allowed and claims 24, 25, 47 and 49-56 are directed to allowable subject matter. Claims 1-19 and 26-35 have been withdrawn as the result of an earlier restriction requirement.

At page 2 of the Office Action, the Examiner rejects claims 39, 46, and 48 under 35 U.S.C. §112, first paragraph, as failing to comply with the written description requirement. The Examiner asserts that the claims contain subject matter which was not described in the specification in such a way as to reasonably convey, to one skilled in the art, that the inventors, at the time the application was filed, had possession of the claimed invention. For the following reasons, this rejection is respectfully traversed.

Claim 39 recites, in part, a calcined tantalum pentoxide powder wherein the packed bulk density is greater than or equal to 3.8 g/cc.

Claim 39 is clearly supported in the present application as originally filed. For instance, the present application, at page 19, lines 5-10, refers to calcined tantalum pentoxide powders having a packed bulk density of > than 3 g/cc, preferably ≥ 3.8 g/cc, and more preferably ≥ 4.0

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g/cc. Clearly, claim 39 of the present application is supported by the specification of the present application.

Claim 46 of the present application recites, in part, a calcined tantalum pentoxide powder wherein the BET surface area is from $3.0 \text{ m}^2/\text{g}$ to $11 \text{ m}^2/\text{g}$. The present application, at page 19, lines 13-18, describes that the calcined tantalum pentoxide powders are characterized by having a BET surface area of $\geq 3 \text{ m}^2/\text{g}$, preferably $\geq 7 \text{ m}^2/\text{g}$, and more preferably $\geq 11 \text{ m}^2/\text{g}$. Thus, claim 46 is fully supported by the specification of the present application.

Claim 48 of the present application recites, in part, a calcined tantalum pentoxide powder, wherein the packed bulk density is from 0.75 g/cc to 3.0 g/cc .

Page 20, line 18, of the present application describes a tantalum pentoxide product that is characterized by having a calcined packed bulk density of 0.9 to 4.0 g/cc . Furthermore, according to original claim 23 of the present application, the calcined tantalum pentoxide powder is characterized by having a packed bulk density of $\leq 3.0 \text{ g/cc}$. Moreover, the present application, at page 19, lines 17-18, specifically states that the calcined tantalum pentoxide powders can be characterized by having a packed bulk density of $\leq 3.0 \text{ g/cc}$, preferably $\leq 1.1 \text{ g/cc}$, and more preferably $\leq 0.75 \text{ g/cc}$. Clearly claim 48 of the present application is fully supported at pages 19 and 20 of the present application.

For the reasons set forth above, full support for these claims exists and this rejection should be withdrawn.

At page 2 of the Office Action, the Examiner rejects claim 23 under 35 U.S.C. §103(a) as being unpatentable over the tantalum pentoxide of Solikamsk as recited in the IDS filed February 18, 2003. The Examiner asserts that the tantalum pentoxide taught in Solikamsk which is formed by the NH_4OH precipitation process appears to be substantially identical to that of the

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instantly claimed tantalum pentoxide, given that the tantalum pentoxide of Solikamsk has a BET surface area and a density within that of the instantly claimed tantalum pentoxide. For the following reasons, this rejection is respectfully traversed.

Claim 23 of the present application recites a calcined tantalum pentoxide powder characterized by having a BET surface area of greater than or equal to $3 \text{ m}^2/\text{g}$; and a packed bulk density of less than or equal to 3.0 g/cc .

The Ta_2O_5 of Solikamsk includes a BET surface area of $4.37 \text{ m}^2/\text{g}$ and a packed density of 2.15 g/cc as cited in the IDS filed February 18, 2003. It is not known from the information available whether the material of Solikamsk is calcined. There is no indication that the Solikamsk Ta_2O_5 is a calcined tantalum pentoxide powder. Calcined tantalum pentoxide powder can have different characteristics than uncalcined Ta_2O_5 . As shown even in the present application, the properties of calcined Ta_2O_5 can be different from uncalcined Ta_2O_5 . Accordingly, the rejection under 35 U.S.C. §103(a) should be withdrawn.

At page 3 of the Office Action, the Examiner asserts that the applicants' arguments filed August 4, 2003 have been fully considered but they are not persuasive. The Examiner states that claim 39 is not supported by page 20 of the present application because page 20 recites that the packed bulk density is either $0.9\text{-}4.0$ or $2\text{-}4 \text{ g/cc}$. Furthermore, the Examiner asserts that claim 46 is not supported by pages 19 and 20 of the present application because pages 19 and 20 do not recite a BET surface area of 3.0 to $17 \text{ m}^2/\text{g}$ for a calcined product. According to the Examiner, the specification instead recites a BET surface area of ≥ 3 to $\geq 11 \text{ m}^2/\text{g}$. Furthermore, the Examiner asserts that claim 48 is not supported by page 19 of the present application because it recites a packed bulk density of $0.75\text{-}3 \text{ g/cc}$.

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According to pending claims, claim 39 of the present application recites a calcined tantalum pentoxide powder of claim 20, wherein the packed bulk density is greater than or equal to 3.8 g/cc. As noted above, claim 39 is fully supported at page 19, lines 9 and 10. However, the Examiner's explanation for rejecting claim 39 seems to relate to claim 38, which recites, in part, a calcined tantalum pentoxide powder, wherein the packed bulk density is from greater than 3 g/cc to 4 g/cc. Claim 38, however, is also fully supported at page 19, lines 9 and 10. Thus, for the reasons set forth above, the Examiner's rejection of claims 39, 46, and 48 should be withdrawn.

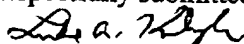
At page 3 of the Office Action, the Examiner objects to claims 24, 25, 47, and 49-56 as being dependent on a rejected base claim. The applicants believe that the comments set forth above should convince the Examiner that the rest of the claims are ready for allowance.

CONCLUSION

In view of the foregoing remarks, the applicants respectfully request the reconsideration of this application and the timely allowance of the pending claims.

If there are any other fees due in connection with the filing of this response, please charge the fees to Deposit Account No. 03-0060. If a fee is required for an extension of time under 37 C.F.R. §1.136 not accounted for above, such extension is requested and should also be charged to said Deposit Account.

Respectfully submitted,



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